



**THE 10TH ANNUAL
SYMPOSIUM FOR
UNDERGRADUATE
PSYCHOLOGY
ENGAGEMENT
& RESEARCH**

To recognize & honor
undergraduate research &
community engagement during
the 2018-2019 academic year.

April 25th, 2019 • 3:00 - 5:00 P.M.
The Big 12 Room • Kansas Memorial Union

**University of Kansas
Department of Psychology**

**Symposium for Undergraduate Psychology
Engagement & Research
2019**

**Awards to be presented at the
Psychology Recognition Ceremony**

**Best Honors Thesis Project
Best Independent Study Project
Best Class Project
Best Use of Quantitative Methods**

CATEGORY: HONORS THESIS

(1) Differences in Experiencing the Speech-to-Song Illusion as a Function of Age

Hollie Mullin

(Dr. Michael Vitevitch)

Honors Thesis

Illusions occur when our senses incorrectly perceive what is in our environment (Castro, Mendoza, Tampke, & Vitevitch, 2018). Although visual illusions tend to be the most well-known, illusions can affect many of our senses. The Speech-to-Song Illusion is an auditory illusion that occurs when a spoken phrase is repeated. After several repetitions, some listeners report that the phrase seems to be sung, rather than spoken. Node Structure Theory (NST), a model of language processing, was recently investigated as the cognitive mechanism that underlies the Speech-to-Song Illusion (Castro et al., 2018). NST accounts for a variety of language – and memory – related phenomena, including increased experiences of the tip-of-the-tongue phenomenon (where you know a word, but can't bring it to mind) in older adults. Based on the age-related change in the tip-of-the-tongue phenomenon, it can be predicted that older adults are less likely to experience the Speech-to-Song Illusion than younger adults. This project will examine how older and younger adults experience the Speech-to-Song Illusion by collecting data through Amazon Mechanical Turk. This project will tell us more about the Speech-to-Song Illusion and help us better understand speech and music perception.

(2) Discrepancies between teacher- and child-reports on proactive and reactive aggression: Does prosocial behavior matter?

Sofia Mildrum Chana, Elisabeth C. Tampke

(Dr. Paula Fite)

Honors Thesis

Previous research has demonstrated that informants differ on their reports of childhood aggression subtypes (i.e., proactive, goal-oriented aggression and reactive, impulsive aggression). Further research is needed to understand how reporters' discrepancies may be moderated by other variables, as well as how these associations may change over time. This project examines discrepancies between teacher and student

reports of proactive and reactive aggression as well as how teacher perceptions of prosocial (i.e., positive, helping) behavior moderates reporters' discrepancies of aggression in a sample of elementary school-age youth over an academic year (i.e., fall and spring). No difference in the magnitude of reporters' discrepancies across time was found ($t_s=1.486$ & -0.868 , $p_s>.05$). Correlations indicated an association between informant reports of reactive ($r_s = .152$ & $.309$, $p<.05$) but not proactive aggression ($r_s=.083$ & $.080$, $p>.05$). Further, analyses indicated that prosocial behavior didn't moderate the associations between reports of proactive aggression ($\beta_s=.089$ & $.034$, $p_s>.05$). In contrast, at low levels of prosocial behavior, teacher and child reports of reactive aggression weren't statistically related ($\beta=.063$, $p=.345$), but at high levels of prosocial behavior, teacher and child reports on reactive aggression were positively associated ($\beta=.350$, $p=.007$) in the fall semester. Findings suggest that teachers and students are more similar in their reports of reactive than proactive aggression, particularly when teacher perceptions of prosocial behavior are high. Implications and future directions are discussed.

(3) Testing the Interaction of Control and Structure on Workplace Self-Efficacy

Jordan Rodriguez

(Dr. Mark Landau)

Honors Thesis

The notion that humans have an intrinsic motivation to perceive the world as structured and orderly, as opposed to ambiguous and disorderly, is well established in theoretical conceptions of control motivation. This motivation is rooted in the belief that in order to produce and carry out behaviors, one must perceive the world and its events as reliable, in which actions are followed by predictable outcomes. When faced with a lack of control, one might experience apprehension in relation to their inability to influence outcomes. However, recent research has suggested that by simply perceiving the world as structured and orderly, people are able to compensate for reduced control over outcomes. We theorize that external structure is imperative to perceptions of self-efficacy, insofar as the external environment is chaotic and disorderly, self-efficacy alone will not promote motivated goal pursuit. We therefore hypothesize that reduced control, combined with a structured (vs.

ambiguous) workplace environment will lead to greater perceptions of self-efficacy. Anticipated results should show that when faced with a control threat, participants in the structure condition will show greater self-efficacy than those in the ambiguous condition.

(4) Investigating the Relationship Between Emotion Regulation and Dreams

Brooke Ostrander
(Dr. Nancy Hamilton)
Honors Thesis

Lower individual emotional regulation may lead to more nightmares experienced. In addition to this, the more negative an individual's mood or emotional state is during the day, the more likely they will have a nightmare the following night. The relationship between dreams and emotions in regards to the purpose of this study were determined through clinical interviews, pre- and post-sleep questionnaires, and a baseline survey. Information was gathered on emotional affect, dream content, mood state, and emotion regulation. Understanding the relationship between emotion regulation and dreams may help improve nightmare occurrences, mood, emotional regulation, and sleep quality.

(5) fMRI Connectome: Reexamining the correlations between attachment and brain functioning and structure

Ali Ciersdorff
(Dr. Omri Gillath)
Honors Thesis

Previous studies on the neural underpinnings of attachment style have used mostly small sample sizes and failed to provide consistent results. The goal of the current project is to deal with these limitations by using a large existing database of brain images to reexamine the correlations between individuals' levels of attachment anxiety and avoidance and their brain structure and functioning. To achieve this goal, a measure was created to assess attachment style that could be used within the fMRI connectome project database. Currently there is no measure to assess attachment in that database. In the first study, I identified the potential items that could be used to assess attachment from existing questionnaires within the database. I then compared the scores from 300 participants on these items with their scores on a well-

studied attachment measure the Experiences in Close Relationships (ECR, Brennan et al., 1998). Using correlations, regressions and an exploratory factor analysis I created a 20-item two factors scale. In a second study, I will use the measure I created in the first study and a new sample of $n = 300$ to run a confirmatory factor analysis. Once I confirm the factor structure, I will correlate the scores from the new measure I created with brain functioning and volume of participants in the connectome database. I hypothesize that insecure individuals would have lower cell density (less volume) in the hippocampus. I also predict that anxiously attached individuals would show higher activation in limbic areas (e.g., ATP, hippocampus, amygdala, dorsal anterior cingulate cortex) and less activation in control regions (e.g., orbitofrontal cortex in the PFC). Finally, I predict that avoidant individuals would show higher activation in the subcallosal cortex (SCC). The results of the studies will shed light on the correlations between attachment style and brain structure and functioning, and the neural underpinnings of close relationships more broadly.

(6) The Effect of an Abstract Construal on Perceptions of a School Shooting

Trevor Lies, Ariel Mosley
(Dr. Monica Biernat)
Honors Thesis

The goal of the present research is to examine whether engaging in abstract (vs. concrete) thinking influences participants to make external attributions for a school shooter's actions. Construal Level Theory (CLT) suggests that when thinking about a situation or object concretely, individuals emphasize details in isolation, whereas thinking about the same object or scenario abstractly highlights its larger meaning (Vallacher & Wegner, 1987). One common distinction that is made in determining the reasons for a person's actions is whether that action is committed due to their disposition (internal) or situational factors (external), known as Attribution theory (Heider, 1958; Fiske & Taylor 2012). Combining insights from Attribution theory and CLT, we examined whether participants could be influenced to think abstractly (vs. concretely) about a situation, as to increase the salience of situational factors. We predicted that when participants are made to think abstractly about a school shooting, they will be more likely to give external attributions of

responsibility. Results showed support for the hypothesis that priming participants ($N = 183$) with an abstract construal would lead to more external attributions. Priming an abstract construal also led to lower perceptions of severity, and a higher rating of positivity toward the shooter. Our results also revealed a race effect such that Ethnic participants reported more external attributions of responsibility than White participants, whose levels did not vary by condition.

(7) Mindset during Exercise and its Effect on Depression

Enya Pan, Kendall Kohnle
(Dr. Rick Ingram)
Honors Thesis

Depression have become more and more prevalent in the modern world we are living in. The decreased quality of life and mortality rate (Zivin, Yosef, Miller, Valenstein, Duffy, Kales, Vijan, & Kim, 2015) related to the prevalence of depression are severe problems we are facing these days. Thus, research conducted in favor of developing effective treatments for depression is important and urgent. Multiple studies have been conducted to examine the effectiveness of exercise on treating depression. The results in these studies vary, and the conclusion about whether exercise has a significant effect on decreasing depression remains vague. To discuss about the cause-and-effect relation between exercise and change in depression, this study looks further into the depressed individuals' mindset during exercise and how the mindset affects their experience with depression. This study recruits participants from the SONA subject pool at the University of Kansas. Students who are eligible for the study determined by their response score on the screening survey will be placed into the control group, exercise group, or mindset group. Depressed individuals in the control group do not receive any intervention. The exercise group will be instructed to exercise and be assessed on their depression level before and after the intervention. The mindset group will be manipulated to have a set mind and be assessed on their depression level before and after the intervention. The study will run a one-way ANOVA to analyze and compare the depression levels between the control, and mindset groups. The study will help us understand how depressed individuals' mindset and exercise affect their experience with depression, and this understanding will

be beneficial for future treatment designs with exercise for the depressed population.

(8) Decoding the Neural Substrates of Intent to Speak Brianna Marsh, Juhi Kidwai, Dr. Jonathan Brumberg *(Dr. Jonathan Brumberg)* Honors Thesis

In this study we used an electroencephalogram (EEG) based brain-computer interface (BCI) to decode intent to speak and complexity of intended word from healthy participants using a brain wave called the contingent negative variation (CNV). The CNV is a brain wave that is elicited in anticipation of a motor command like speaking (indicating intent to speak), and may be further implicated in inhibition of competing alternatives during cognitive planning. We defined 9 levels of complexity via 3 levels of increasing syllable structure by 3 levels of word frequency in American English. Healthy participants first saw the stimulus word presented in red or green to instruct them to speak (green) or not speak (red) the word aloud at the next cue when the word turns white. Each word appeared throughout the experiment in both a "speak" and "don't speak" condition in randomized order. An artificial neural network (ANN) will be trained on this data to then decode, or predict, when participants had intent to speak and what level of word complexity the stimulus had from brain activity alone. Thus far, we have found that the CNV presence is indicative of intent to speak, but the ANN may be needed to decode finer aspects of the signal to determine word complexity. When applied to existing BCI's for communication, we hope this will speed up the process of communication by separating decoding of speech intention from speech content.

(9) Ambivalent Sexism and the #MeToo Movement: How Outgroup Threat Affects Ideologies Lindsey Gollwitzer *(Dr. Mark Landau)* Honors Thesis

In recent years, the #MeToo movement has raised awareness of sexual misconduct, women's rights, and the distribution of power in society. Unfortunately, the movement has been met with suspicion and resistance, which obstructs social change and increases political polarization. The purpose of the current research is to examine the roots of men's occasional hostility toward

the movement. I draw on Social Identity Theory's insight that people generally react negatively to perceived threats to their ingroup. In the case of #MeToo, men may feel as though their group's value is under attack. Building on Ambivalent Sexism Theory, I hypothesized that men would react to this group-based threat with two forms of retaliatory sexism. One, called *hostile sexism*, entails viewing women and women's rights efforts as stripping men of their societal status. A second form is *benevolent sexism*, which entails reducing women to certain qualities, such as emotional warmth, that confine them to narrow social roles. In an ongoing study testing this hypothesis, I randomly assign male participants to read about one of two portrayals of the men charged by the #MeToo movement for sexual misconduct. One portrayal depicts these men as demographically similar to themselves ("men like me"), thereby triggering a sense of ingroup threat. The other portrayal depicts the accused men as prominent public figures and celebrities who form a remote outgroup. Afterwards, participants complete well-validated measures of hostile and benevolent sexism. I predict that the ingroup-threatening portrayal will increase both hostile and benevolent sexism. Data collection is ongoing.

(10) Assessing the Role of Parental Psychological Control in the Relationship Between Alexithymia and Depressive Symptoms in Adolescents in Juvenile Detention

Sarah Rooney, Moneika Sutton M.A.
(Dr. Paula Fite)
Honors Thesis

Background. Adolescents in juvenile detention are at a higher-than-average risk of developing internalizing problems, such as depression. Parental practices can influence the development of psychological issues in their children especially when their children have traits that increase their risk of developing a psychological disorder. *Objective.* The current study investigated whether parental psychological control influenced the relationship between alexithymia (the inability to express and identify feelings) and depressive symptoms in adolescents in juvenile detention. *Methods.* 111 adolescents (M=15.52 years, SD=1.38) from a Midwestern juvenile detention facility (47.7% Caucasian, 71.2% Male) completed an intake survey that included items measuring alexithymia, depressive symptoms and parental psychological control.

Results. A link between alexithymia and depressive symptoms was evident, with higher levels of alexithymia associated with higher levels of depressive symptoms. There were also positive associations between parental psychological control and alexithymia and depressive symptoms, with higher parental psychological control associated with higher alexithymia or depressive symptoms. However, parental psychological control did not moderate the association between alexithymia and depressive symptoms.

Conclusions. The significant first-order effects imply that it could be possible to decrease depressive symptoms by targeting alexithymia and psychological control for prevention and intervention in the facility. Findings did not support a moderating effect of parental psychological control in this population of juvenile detainees. Associations between these three variables should be investigated further in future research, and other moderating factors should be evaluated.

(11) Drop the base: Omission MMN sensitivity to morphological status, predictability, and their interaction

Joseph Denning
(Dr. Robert Fiorentino)
Honors Thesis

Using electroencephalograph (EEG), electrical activity in the brain can be recorded. The mismatch negativity (MMN), a response that can be found using EEG, is particularly useful with respect to sound processing in the brain. Using MMN, a stimulus (a standard) is shown many times followed by a rare stimulus (a deviant) shown only once. In the past, researchers have consistently demonstrated that the MMN is sensitive to basic sound differences (i.e., the MMN is robust when the deviant varies from the standard by one or more sounds, such as ba and da). However, it is a matter of current debate whether the MMN is sensitive to higher level language properties. Previous research has also suggested that the MMN may be sensitive to predictability. We plan to test whether the MMN is sensitive to morphemes (e.g., in the word played, both play and -ed are morphemes) and whether these morphemes are used to predict.

(12) “Are You Sexually Active?”: The Conceptualizations of Temporality in Answering This Question

Bailey Coolidge, Dr. Charlene Muehlenhard
(*Dr. Charlene Muehlenhard*)
Honors Thesis

When college students get medical exams, they are typically asked, “Are you sexually active?” The medical professionals’ goal is to get information that could influence discussions about contraception and safe sex. However, this question lacks specificity regarding type of behavior and time. Patients need to decide (a) what sexual activities would make them “sexually active” and (b) what timeframe they should use. Regarding behaviors, college students have varied opinions about what behaviors count as “having sex”; they might also have varied opinions about what behaviors count as being sexually active. Regarding the timeframe, the question, “Are you sexually active?” is worded in the present tense, but patients are not engaging in sexual activity while in the physician’s office. Do they interpret this question as including anything in their history, or in the last month, or in the past year? Do they consider their expectations about sexual activity in the near future? The results of this research could help professionals clarify likely sources of miscommunication between medical professionals and patients.

(13) Behavioral Economic Intersections of Alcohol and Cannabis Use in Undergraduate Students: Implications for the Reinforcer Pathologies Model of Addiction

Tyler Thornton, Gideon Naude, Dr. Derek Reed
(*Dr. Derek Reed*)
Honors Thesis

While recreational cannabis use is becoming increasingly prevalent in the United States it has received relatively little attention within behavioral economics. Toward this end, an examination of the behavioral risk factors is timely. The reinforcer pathologies model of addiction proposes that behavioral addictions are largely a function of two behavioral economic constructs: operant demand and delay discounting. These constructs manifest as behavioral markers of addiction in the form of excessive demand for a reinforcer and strong preference for immediate access and consumption of this reinforcer in spite of suboptimal long-term outcomes. The first aim of the present investigation was to identify the degree

to which discounting (money and alcohol) and demand for hypothetical alcohol differ between drinkers who don’t use cannabis and co-users (i.e., individuals who use both) in a college sample. As our second aim we examined the relation between discounting (money, alcohol, and cannabis) in co-users as well as demand for hypothetical alcohol and cannabis. Regression analyses suggest co-users have significantly higher demand for alcohol, demonstrate steeper delay discounting of alcoholic drinks, and are at greater risk for alcohol use disorder than individuals who drink yet don’t use cannabis. Within the co-using group, cannabis O_{max} (peak expenditure) was positively associated with alcohol Intensity (drinks consumed when priced at \$0.00) as well as alcohol O_{max} . Moreover, steeper monetary discounting ($\ln k$) and greater alcohol Intensity were associated with greater cannabis Intensity. These results integrate well within the reinforcer pathologies model of addiction and add to literature on co-substance use in the college population.

(14) The Relationship Between Depressive and Anxiety Symptoms and Protective and Risk Factors in Black Adolescents in Kansas City, KS

Tacia Burgin, Jomella Watson-Thompson, Courtney Moore
(*Dr. Jomella Watson-Thompson*)
Honors Thesis

The estimated lifetime prevalence of depression among adolescents is as high as 20% (Torikka et al., 2014). While there is extensive research on depressive symptoms in general, there is little research on depressive and anxiety symptoms in African American youth. My research project examined the relation between risk and protective factors and depressive and anxiety symptoms in African American youth living in Kansas City, Kansas. I hypothesized that depressive and anxiety symptoms would be high with more exposure to risk factors, such as neighborhood victimization and antisocial behavior and low with more exposure to protective factors, such as family emotional support and positive self-esteem (Kerby, 2012; U.S. Department of Health, 2009). For this project, 26 youth completed surveys assessing depressive and anxiety symptoms, supportive family culture, positive self-esteem, neighborhood victimization, and adverse childhood experiences. In general, few youth reported depressive and anxiety symptoms and most youth reported low risk factors and high protective factors. There was a statistically significant correlation between victimization

and depressive and anxiety symptoms. No correlation between depressive and anxiety symptoms and other risk or protective factors was observed. The results are discussed with respect to possible explanations for the findings, limitations, and ideas for future research. The findings invite opportunity for future research on the reason why African American youth may be less likely to report depression and anxiety symptoms, particularly as they relate to measurement, rapport, and stigmatization of mental health.

(15) American = Heterosexual?

Kayla Lawson

(Dr. Ludwin Molina)

Honors Thesis

This study examines the extent to which sexual orientation identity (heterosexual vs. homosexual) is associated with "American." This study utilized an Implicit Association Test (IAT) in which participants had to pair national symbols (American and Foreign) and sexual orientation symbols (heterosexual and homosexual). Findings indicated that there was a moderate association between heterosexuality and American national identity at the implicit level. Implications of these results will be drawn for social issues of diversity and national identity.

(16) Top-down Influences on the Speech-to-Song Illusion

Lauren Soehlke

(Dr. Michael Vitevitch)

Honors Thesis

The Speech-to-Song Illusion was discovered by Deutsch in 1995, while she was working on fine-tuning the spoken commentary on her CD *Musical Illusions and Paradoxes*. Deutsch had the phrase "sometimes behave so strangely" playing on a loop, and noticed that after a series of repetitions the phrase sounded as though it was being sung rather than spoken. Although a number of previous studies have examined which characteristics of the stimulus will produce the illusion, until now, there was no description of the cognitive mechanism that underlies the illusion. The processes found in the Node Structure Theory (NST) suggests that it may be used to explain the normal language processing, as well as other auditory illusions, including the Speech-to-Song Illusion. The processes found in NST may also serve as a bridge between top-down and bottom-up influences on the processing of language and music. NST allows for

top-down influences on auditory perception, which recent work has shown that top-down processing, such as musical knowledge and memory from previous exposure to the word list, may be an essential contribution to the experience of the Speech-to-Song Illusion. This study assesses the extent to which top-down and bottom-up factors influence the Speech-to-Song Illusion and whether NST can adequately account for those influences.

(17) Quality of Life Parameters for Three Medically Complex Infants in the Neonatal Intensive Care Unit

Julia Davis

(Dr. Deanna Hanson-Abromeit)

Honors Thesis

Quality of life (QOL) is an outcome measure commonly used in medical settings. While the definition of QOL is fluid, it is commonly a multidimensional, subjective, and context-based evaluation of a person's wellbeing. The purpose of this study is to operationally define the constructs of QOL for infants and evaluate the QOL of three medically complex hospitalized infants receiving music therapy across four weeks of NICU hospitalization. This study is part of a larger music intervention study. The first phase of this study operationally defined QOL constructs for infants, established criteria for coding QOL in infants, and created a measurement tool for coding data. The proposed parameters of infant QOL consist of four domains: physiological, psychological, social, and developmental wellbeing. In the second phase, a subset of the existing data set of videos of three medically complex infants in the NICU receiving Music-Based Developmental Stimulation (MBDS) will be analyzed to determine QOL within the context of the music intervention across four weeks of hospitalization. Nonparametric statistics (e.g., Chi Square) will be used to analyze changes in the dimensions of infant QOL to determine if MBDS influences the infants' overall QOL. Dissemination of this study will influence the clinical practice of NICU professionals (e.g., music therapists, nurses) working with medically complex infants and provide a tool which can assess the QOL parameters of hospitalized medically complex infants.

(18) Stigma and Attitudes Surrounding the Intersection of African American Women, Domestic Violence, and Substance Abuse

Michelle Oboro, Dr. Carl Lejeuz
(Dr. Michael Vitevitch)
Honors Thesis

Discourse and evidence supporting African American women face problems of co-occurring partner violence and substance abuse are so compound that an intersectional, multidimensional model is essential to their analysis. Our primary focus in this study will be to examine the effects of survivor race/ethnicity and mental health status on women's attitudes towards a scenario involving domestic violence as well as the correlation between women's race and attitudes to the same scenario. We intend to observe level of perception as a function of: a survivor's racial identity, participant's race, and survivor's psychological state. More sympathy is expected from Black American women, than White American women, towards a Black female abuse survivor in this online study. Anticipated results can assist in revealing factors that contribute to the stigma against Black women's experiences with domestic abuse and mental diagnosis which create invisible, yet powerful social barriers outside of their dangerous relationship conditions.

(19) Beliefs About Online Gaming Between Frequent and Non-Frequent Gamers

Corey Monley
(Dr. Bruce Liese)
Honors Thesis

As of 2018, 66% of individuals in the United States aged 13 years or older regularly play video games, with overall video game play increasing by 8% since 2013. Some individuals experience problems with psychological, neurobiological, and/or social functioning, associated with excessive gameplay. In 2013, Internet Gaming Disorder (IGD) added to the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5; APA, 2013)* under Section III: Conditions for Further Study. The criteria for IGD resemble criteria for recognized behavioral and chemical addictions. Studies examining online gaming have typically used self-report methods. Focus groups allow for the collection of novel data directly through participant interactions.

The purpose of the present study is to elicit attitudes of gaming and gaming behavior between two groups: frequent gamers and non-frequent gamers. This study employed self-report surveys and focus groups for data collection. Focus groups contained either (1) frequent gamers or (2) non-frequent gamers. Focus groups followed the same format and general outline regardless of condition. Discussion questions focused on defining the term "gamer", motives for gaming, what constitutes unhealthy gaming, and whether or not excessive gaming should be a diagnosable disorder. Although there was some overlap, non-frequent and frequent gamers held different beliefs about gamers and their motives; frequent gamers regarded social aspects more positively than non-frequent gamers (e.g., social reinforcement and community vs. the game as a pseudo-social environment). Overall, a majority of group members, regardless of condition, agreed that video games are the object of a broader addiction syndrome (i.e., that video game addiction is reflective of underlying biological and psychological processes), and that excessive gaming is consequential in effects. Individuals, regardless of gaming involvement, believe that excessive gaming is a behavioral addiction that should be diagnosable.

(20) Family Separation, Familismo, and Posttraumatic Stress in Immigrant Latinx Children

Veronica Lauren Heredia
(Dr. Omar Gudiño)
Honors Thesis

Numerous studies have examined the effects of forcible child-parent separations during immigration, and its effects on Latinx youth psychopathology; however, few studies have investigated the numerous effects non-forcible family separations may have on this demographic. This consideration is especially pertinent to immigrant Latinx populations, given the prevalence of non-forcible separations that occur during the immigration process (Hondagneu-Sotelo, 1994) and cultural values surrounding familial significance, or, *familismo* (Ayon et al., 2010). The present study sought to rectify this gap in the literature by examining whether non-forcible family separation is associated with the familial perspectives of immigrant Latinx children, and if these perspectives then moderate the role of family as a protective factor against trauma. To do so, the present study drew from data collected by Gudiño and colleagues (2011); their study examined the relationship between immigrant stressors and

community violence exposure in Latinx youth with posttraumatic stress. The present study drew data from 62 immigrant Latinx children, utilizing measures examining family perspectives (perceived family support; *familismo*) and posttraumatic stress symptoms. We hypothesized that family separation would be associated with family perspectives, with children who had been separated having lower ratings relative to those who had not been separated. It was also hypothesized that these family perspectives would moderate the relationship between community violence exposure and posttraumatic stress, predicting that higher ratings on family variables would be protective against the effects of violence exposure. In order to analyze the relationship between family separation and familial perspectives, a t-test was utilized; multiple regression analyses were utilized to examine if familial perspectives moderated the interaction between violence exposure and posttraumatic stress. This study ultimately found that family separations were not associated with the familial perspectives of immigrant Latinx children, and these perspectives did not moderate the role of family as a protective factor against trauma. However, an association between *familismo* and posttraumatic stress was found. Further research is needed to examine the commonality of the association between cultural values surrounding family and posttraumatic stress, and what this relationship may more broadly say about methods of coping within the Latinx community.

(21) Does the Self's Structure Predict Negative Feelings Arising from Hypocrisy?

Abhay Alaukik, Trevor Swanson

(Dr. Mark Landau)

Honors Thesis

Self-Complexity, which refers to how we arrange *self-aspects* (e.g., *Me-at-school*, *Me-with-family*) and *attributes* (e.g., *hard-working*, *competitive*), predicts how people process and buffer against threats (Linville, 1987). Previous research has shown that *external* threats, such as failing an exam, cause more negative emotions in people with relatively simpler (vs. complex) self-concepts because a larger portion of their total self-concept is threatened. Still, no prior research has tested whether self-complexity moderates negative reactions to internal threats that arise from an awareness of one's personal shortcomings. To test this possibility, we

turned to research on hypocrisy, or the realization that one's past actions contradict one's stated standards (Stone, 2012). Integrating these literatures, we hypothesized that when individuals are led to feel hypocritical, those with simple self-concepts would experience more negative affect than those with complex self-concepts. We measured participants' self-complexity, randomly assigning them to a hypocrisy reminder or a control condition, and measured their negative affect. Results did not support hypotheses. Lower levels of self-complexity did predict negative affect, but only in the control condition. This might imply that the hypocrisy manipulation was not fit for the task, or that it created such a large effect that people used other defense mechanisms to buffer negative emotions. Future research could conceptually replicate the current study using alternative inductions of hypocrisy.

(22) Interactions of Stress Levels, Sleep Quality, and Alcohol Intake in University Students

Samantha Ellis, Westley Youngren M.A.

(Dr. Nancy Hamilton)

Honors Thesis

College students experience high levels of stress, decreased sleep quality, and potentially consume large amounts of alcohol, binge drinking. In this study the day to day relationships among sleep quality, alcohol intake, and stress levels in students at the University of Kansas are explored. This study sought to confirm previous findings of, stress and alcohol use negatively influence sleep quality as well as stress and alcohol use being related. In this study the interactions of sleep quality, alcohol intake, and stress levels were measured using clinical interviews as well as pre- and post-sleep surveys for seven consecutive days. Information collected includes; perceived stress, alcohol consumption, perceived intoxication/impairment, amount of sleep, perceived sleep quality, stressful events during week of participation, and dream/nightmare description. Participants were recruited from the PSYC 104 SONA pool, n= 61. Correlations and statistical analysis were done using multilevel modeling on SPSS. Significant fixed effects were found with Daily Stress and Alcohol intake negatively effecting sleep duration as well as Daily Stress increasing Sleep Latency. It was then concluded that after college students report increased stress or alcohol use, they report negative differences in their sleep – with 54% reporting alcohol use.

(23) Does psychological safety within a group significantly alter self vs. Peer evaluation

Baylee Corpening

(Dr. Marsha McCartney)

Self-reviews and evaluations are a prominent tool used in academia to help gauge student performance and contribution. However, popular evaluation tools such as CATME have found distinct tendencies for some students to evaluate themselves differently than their peers do. This study serves to better understand discrepancies between self and peer evaluations and what factors may contribute to them, specifically whether or not a groups psychological safety may increase level of contribution and engagement from the group participants, as well as promote an accurate assessment of personal and peer performance. To evaluate this, the psychological safety of over 130 students (dispersed into 26 groups) will be analyzed to determine whether a significant difference in safety measures exists between students who evaluated themselves significantly different than their peers did.

(24) Hyper-palatable Foods: Application of New Quantitative Definition too one of KU's dinning centers, Mrs. E's

Kaitlyn Rohde

(Dr. Tera Fazzino)

Introduction: Hyper-palatable foods (HPFs) have been suggested to play a role in the obesity epidemic because they can override homeostatic mechanisms and lead to overeating. Common ingredients in HPFs include certain combinations of fat, simple sugars, complex carbs, and salt. The majority of existing literature on HPFs has used descriptive terms to identify HPFs. There is currently no established numerical definition of HPFs in humans. Therefore, the purpose of this project was to identify a numeric definition of HPFs and apply this definition to the cafeteria dining menu at Mrs. E's Cafeteria, an all-you-can-eat dormitory cafeteria at KU.

Methods: Descriptive definitions of HPF items from existing literature were entered into nutrition software to obtain quantitative nutrition data. Next, the percent of calories from fat, simple sugars, and complex carbohydrates, along with percent weight from salt, was calculated for each food. A data-driven approach was used to determine the common numeric combinations of the ingredients in HPFs. The numeric criteria generated were then applied to KU's cafeteria dining

menu covering 27 days to determine the percentage of foods that met HPF criteria.

Results: HPF items comprised 58% (322/549) of the non-duplicated food items offered at the cafeteria. About 35% of HPF items (112/322) consisted of processed/cooked meats and meat-based dishes. Desserts (e.g., cakes, pies) accounted for over 10% (34/322) of HPFs.

Conclusion: Applying a data-driven definition of HPF to a KU cafeteria dining menu revealed that HPFs constituted a substantial proportion of foods available on the cafeteria menu.

Keywords: Hyper-palatable Foods (HPFs), cafeteria

CATEGORY: **INDEPENDENT STUDY**

(25) Reducing Prejudice Towards Atheists Caused by Religious Priming

Evelyn Wilson, Haya Abbas, Joshua Higgins, Christine Huang, Elizabeth Jones, Joshua Rice, Dr. Anna Pope
(Dr. Anna Pope)

The purpose of this study is to determine if priming of secular authority, such as law enforcement, will increase trust towards atheists. Current research suggests that atheists experience prejudice and are discriminated against. The basis of this prejudice is rooted in mistrust from the perception that atheists lack belief in a higher authority that encourages moral behavior. These researchers seek to determine if reminders of secular authority will increase trust towards atheists. This study uses religious priming followed by an intervention of a secular authority reminder via audio clip, and a resource allocation task to various groups, one being an atheist group, to determine if trust is increased after participants listen to the secular authority audio clip. We suspect the results will show that participants who listen to the secular authority audio clip will give higher allocations to the atheist group than the participants who listen to the religious sermon alone.

(26) The association of technology use and depressive symptoms among older adults: Is the internet a friend or foe?

Cody Ptacek, Jacqueline Minahan M.A.
(Dr. Tamara Baker)

Much research has been conducted investigating the relationship between technology use and psychological well-being in older adults. Data show that an estimated 59% of adults 65+ years of age use the internet, with at least 71% of those adults going online every day. Internet use was found to be associated with lower rates of depression among older adults. Internet use among this population may decrease isolation among this population of older adults. To address the barriers and facilitators of technology use among older adults, this study aimed to assess the relationship between internet use and depressive symptoms among a sample of adults, 57-85 years of age. Data were taken from Wave 1 of the National Social Life, Health, and Aging Project (NSHAP), a nationally representative sample of US older adults. A linear regression model was calculated, with results showing that internet use explains a significant amount of variance in reports of depressive symptoms above and beyond that explained by covariates (e.g., age, loneliness, education, income, etc.). These results may suggest the potential benefits of technology use among older adults by providing entertainment, information, and/or functionality to its users.

(27) Adult Attachment Style and Aggressive Response to Provocation

Levi Wakeman, Vaughn Gessley, Garrett Girad, Dr. Omri Gillath
(Dr. Omri Gillath)

In the current study, we investigated the association between attachment style and aggressive inclinations. Participants (n = 98) were asked to write an essay and then either received a negative (provocation) or a neutral (control) feedback from a supposedly another participant (who did not exist in reality). Following the feedback participants were asked to complete a Voodoo Doll task, which involved using pins to stab different sections of a doll representing the other (fictitious) participant. Total number of pins was used as an index of aggression. Individuals who were provoked (negative feedback) put more pins in the doll than those in the control group. Anxiously attached people also stabbed

the doll with more pins (especially in the heart area) as compared to people low on anxiety (securely attached). This was especially the case when they were not provoked (the provocation seemed to wash off the differences in effects due to anxiety). We discuss these results and the possibility of reducing aggression by making people feel more secure.

(28) Relationship between Self-Reported Attractiveness and Sexual Partner Preference

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According to evolutionary psychology, indexes of health and reproductive potential such as symmetry and hygiene help people select their mates. A previous study in our lab showed that even brief exposure to such signs affected attractiveness ratings. Thus, symmetric and hygienic targets had higher attractiveness ratings than targets that were non-symmetric or non-hygienic. Surprisingly, race of the target also affected the ratings. In the current study, we will further examine the role played by race of target and race of rater. We will also examine the associations between self-reported attractiveness, attachment style, and life history indexes and potential partner's attractiveness. To do that, we will collect a large data set consisting of both black and white participants. We predict that participants will be attracted to other's who are similar to them on their attraction (i.e., highly attractive participants will be attracted to highly attractive targets). We also predict that attachment insecurity, and mainly avoidance will be attracted to more targets regardless of their attractiveness reflecting preference for short-term sexual strategies. Likewise, people who develop in stable surroundings will be less selective in their mate choices (i.e., rate more targets as attractive). Finally, we predict that race of the rater will affect attractiveness ratings, such that white participants will be more selective in general, and exhibit harsher ratings of black targets.

(29) Does information about learning strategies affect students' motivation?

Saron Demeke
(Dr. Marsha McCartney)

Achievement goal theory addresses the goal setting behaviors of students and seeks to understand how different types of goal orientations affect performance

and other motivational outcomes. The theory is defined by two types of achievement goal orientations, or mindsets: mastery and performance goals. Mastery goals describe students who are motivated by an internal desire to master the task and develop competence. Performance-oriented students are more normatively motivated than mastery students and want to outcompete peers. Previous research found that mastery goals correlated significantly with positive outcomes, including higher grades, increased interest, and improved use of cognitive and metacognitive strategies. Most studies have used self-report questionnaires to investigate how goal orientations relate to performance outcomes without employing any interventional practices to see whether students' goal orientations could be changed. The current study expanded upon past research by administering achievement goal (AGQ-R) and motivational strategies (MSLQ) questionnaires before and after a series of five mini-lectures and activities that informed students about common learning strategies: goal-setting, active reading, distributed practice, in-class strategies, and metacognitive strategies. This study investigates whether the mini-lectures predict students' goal orientations and motivational outcomes. The AGQ-R and MSLQ were administered one week before the lectures begin, immediately after the conclusion of the lectures, and once more near the end of the semester. The participants (N=75) are undergraduate students at a large Midwestern university. Keywords: college students, achievement goal theory, learning strategies, academic performance

(30) Technological Distraction on Driving Performance: Security Attachment Priming

Megan Carlson
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The use of mobile phones has increased drastically in industrialized countries during the last decade (Billieux, 2012). Mobile phones enhance our ability to communicate with one another and provide efficient ways of staying connected with our social circles. Previous research have however shown that mobile phone use is associated with dangerous and antisocial behaviors as well as with symptoms of uncontrolled use and dependence. One of the dangerous behaviors associated with mobile phone use is texting while driving. A recent meta-analysis (Caird et al., 2014) showed that drivers who exhibited prolonged and

frequent glances away from the road; had slower responses to hazards, were involved in a higher number of crashes and did not control their vehicles within the lane as accurately as compared to when they were not texting. Despite the clear findings regarding the dangers involved in texting while driving, people continue to engage in such behaviors (Nemme & White, 2010). It is therefore crucial to identify the underlying mechanisms of technological distraction and find interventions to reduce this type of risky behavior. Past research found associations between a sense of attachment insecurity (a tendency to be worried about rejection and abandonment) inattention and risky driving (Gillath et al., 2018). It is hypothesized that participants primed with secure attachment primes will be less likely to engage in risky behaviors as compared to controls. Half of the participants will be primed with both subliminal and supraliminal security primes whereas the other half will be exposed to neutral primes. They will then be asked to complete a series of surveys and driving simulations. Tendency to look and engage with the phone, and driving violations and accident will be used as DVs. Keywords: Texting and Driving, Secure Attachment.

(31) Differences in Stereotypes and Meta-stereotypes of Transgender Persons

Kristie Camp
(*Dr. Anna Pope*)

The National Center for Transgender Equality (2018) calls for more research to be collected regarding the transgender population. This study aims to define transgender stereotypes and metastereotypes which will allow for the assessment of attitudes, prejudice, and discrimination towards transgender persons (Yzerbyt, 2016). Although measures exist that assess blatant anti-transgender prejudice, our goal is to provide a nuanced approach to understanding stereotypes regarding the transgender community. Currently, there are no empirical tools in psychology to assess modern transphobia, and such a tool would allow us to better understand prejudice and predict identity threat. Samples for the pilot study were collected from the university participant pool (n = 63). The second study utilized subreddits on the website Reddit (n = 427). Participants completed a web-based survey, providing stereotype content for 5 gender groups (i.e. cis-wo/men, trans-wo/men, non-binary individuals).

Participants were presented with 20 blank boxes (10 positive, 10 negative) for open responses. Results from the pilot study indicate positive stereotypes for transgender individuals more closely resembled same gender persons (i.e. trans women and cis women) whereas negative stereotypes did not show a relation between transgender and cisgender individuals. Rather, negative stereotypes of transgender men and women mainly targeted deviance, social distance, and authenticity, confirming and expanding existing measures. Data collected from the Reddit participant pool showed stereotypes and metastereotypes for gender minorities were relatively similar, especially for transgender women. One difference in stereotypes and metastereotypes revealed a trend of “positive” benevolent terms in stereotypes showing first steps towards a definition of modern/benevolent transphobia. In addition, a significant number of negative stereotypes relating to authenticity were assigned to those same groups which suggests these groups are portrayed as being inauthentic.

(32) Are You Too Insecure to be Creative? Attachment Style and Creativity

Alexander Alt, Dr. Yoed Kennett
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As the importance of creative innovation and art subsists, we questioned whether attachment style played a role in individual creativity. In the current study, we examined the associations between creativity and attachment style (levels of attachment anxiety and avoidance). Creativity was assessed using a divergent thinking task (measuring participants ability to generate alternative uses to an object); The Inventory of Creative Achievements and Activities (a subjective questionnaire of how much a participant engages in creative activities and has creative achievements across several different domains); and a subjective evaluation of one’s own creativity. We examined the associations between indexes computed from these various creativity tasks and attachment style and found a negative correlation between participant's attachment anxiety score and their performance in the divergent thinking task (less novelty and appropriateness), and between attachment avoidance and subjective creativity (1-100 rank), creative activities (time spent on creative activities), and creative achievement. However, once we used regression analysis, and controlled for the big five traits

and the interaction between anxiety and avoidance, the only association that held was that between avoidance and creative achievement.

CATEGORY: **CLASS PROJECT**

(33) Pain Expectancy and Monitoring Anxiety

Preston Avellar, Eliza Hemmer, Maya Bluit, Amanda Rebori

Class Project *PSYC 625; Dr. Matthew Rosenthal*

The present study investigated the trait of anxiety and its influence on both baseline heart rate and the increase in that heart rate when anticipating pain. This change in heart rate, cardiovascular reactivity (CVR), was recorded with an electrocardiogram (ECG) at baseline and during the expectation of a shock. All participants (N = 18) were determined to have low (N = 14), moderate (N = 4) or high anxiety (N = 0) using the Beck Anxiety Inventory- Trait (BAIT). The ANOVAs results showed no significant relationship between trait anxiety and baseline heart rate ($p = .854$), nor between trait anxiety and CVR during the expectation of pain ($p = .733$). There is therefore a critical difference in how fear and anxiety influence autonomic nervous system (ANS) activity. These results bring the validity of empirical experimental designs in creating fearful or anxiety provoking conditions into question when attempting to measure their resulting physiological effects. This study did provide weak support for the Law of Initial Values (LIV) in ECG methodology and CVR during the expectation of pain.

